



# VRB SERIES

## WIDE INPUT VOLTAGE RANGE 20 WATTS DC-DC CONVERTER

### FEATURES

- 2:1 WIDE INPUT VOLTAGES:9-18V,18-36V,36-72V
- 20 WATTS (2x1.6x0.5) PACKAGE
- EFFICIENCY TO 80%
- PI INPUT FILTER

### GENERAL SPECIFICATIONS

- SWITCHING FREQUENCY : 500KHz TYP.
- OUTPUT RIPPLE & NOISE : 100mVp-p(20MHz B.W.)
- ISOLATION VOLTAGE : 1500VDC
- ISOLATION RESISTANCE :  $10^9$  ohms
- STORAGE TEMPERATURE RANGE : -40°C TO 100°C
- OPERATING TEMPERATURE RANGE : -25°C TO +71°C
- SHORT CIRCUIT PROTECTION : CONTINUOUS
- CASE MATERIAL : BLACK COATED METAL WITH NON-CONDUCTIVE BASE

### ELECTRICAL SPECIFICATIONS

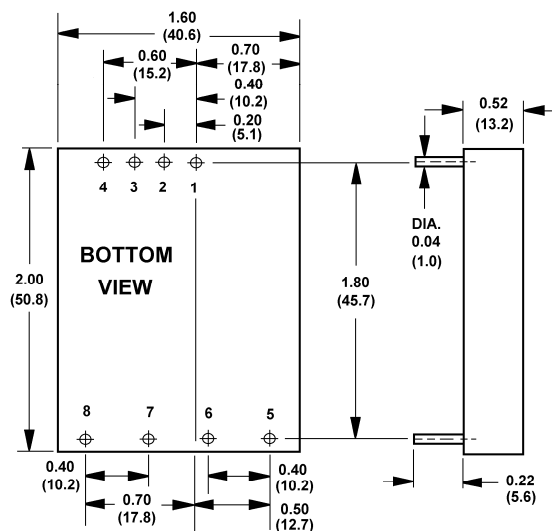
- INPUT VOLTAGE RANGE :12V nominal ...9-18V  
:24V nominal ...18-36V  
:48V nominal ...36-72V
- OUTPUT VOLTAGE ACCURACY :±2%
- LINE REGULATION(FULL LINE) :±0.1%
- LOAD REGULATION(SINGLE) :±1.0%(FL-NL)
- LOAD REGULATION(DUAL) :±3%(FN-NL)
- EFFICIENCY :see table
- EMI/RFI :six-sided continuous shield
- TEMPERATURE PROTECTION :when case temp. at  $95^{\circ}\text{C} \pm 5^{\circ}\text{C}$

PART NO.	INPUT RANGE	OUTPUT VOLTAGE	OUTPUT CURRENT	EFFICIENCY (%)
VRB1205D-20W	9-18VDC	5VDC	4000mA	75
VRB1212D-20W	9-18VDC	12VDC	1670mA	80
VRB1215D-20W	9-18VDC	15VDC	1330mA	82
VRB2405D-20W	18-36VDC	5VDC	4000mA	83
VRB2412D-20W	18-36VDC	12VDC	1670mA	83
VRB2415D-20W	18-36VDC	15VDC	1330mA	84
VRB4805D-20W	36-72VDC	5VDC	4000mA	82
VRB4812D-20W	36-72VDC	12VDC	1670mA	84
VRB4815D-20W	36-72VDC	15VDC	1330mA	85

### MARKINGS AND DIMENSIONS

### PIN CONNECTION

1.



ALL DIMENSIONS IN INCHES(mm)

Dimensions:inches/mm

Unless otherwise specified, all tolerances are  $\pm 0.005/\pm 0.13$

PIN#	SINGLE	
1	+Vin	
2	-Vin	
3	No Pin	
4	Ctrl	
5	No Pin	
6	+VOUT	
7	-Vout	
8	Trim	

\*Ctrl: Remote on/off Control